



## AIR POLLUTION CONTROL DISTRICT

### **Narrative Progress Report AND Semi-Annual Matrix Report Imperial County Air Pollution Control District 2017 Soil Emissivity Grant Grant Number: G17-BM-001**

#### **Summary:**

The County of Imperial Air Pollution Control District (ICAPCD) was the sub-recipient to receive funding via the California Air Resource Board (CARB), for the procurement, accepting testing, maintenance, and operation of a Miniature Portable in-Situ Wind Erosion Lab 2b (PI-SWERL MPS-2b) wind tunnel to assess soil emissivity levels on playa and non-playa lands on/or near the Salton Sea.

The Grant specifically provided \$100,000.00 in funds to procure, acceptance test, maintain, and operate one Miniature Portable in-Situ Wind Erosion Lab 2b (PI-SWERL MPS-2b) to research the feasibility of using a simple, portable air moving device to assess the soil emissivity of non-playa lands in and near populated areas as a screening tool to prioritize areas for PI-SWERL MPS-2b testing. The purpose of the emissivity test is to collect data on vertical mass flux as a function of wind friction velocity induced by the PI-SWERL MPS-2b.

A minimum of five non-playa sites in or near populated areas potentially impacted by windblown dust from Salton Sea playa were tested by ICAPCD using protocols recommended by DUST-QUANT or Formation Environmental.

#### **Grant Agreement Milestones**

Scope of Work Milestone	Target Date	Actual Date
Completion of PI-SWERL procurement and delivery to ICAPCD	April 8, 2018 (180 days after Grant Agreement execution date of October 10, 2018)	November 2018
Completion of PI-SWERL acceptance testing and deployment for active use	April 28, 2018 (200 day after Grant Agreement execution date of October 10, 2017)	Class training: December 17, 2018 Field Training: December 18, 2018 and March 26,27,28, 2019

**Discussion:**

Two unforeseen problems were encountered by the ICAPCD, with the PI-SWERL purchase and deployment. On August 29, 2017 the ICAPCD received the Soil Emissivity Grant Agreement from CARB with a deadline to perform of September 2018. On October 10, 2017 the Imperial County Board of Directors approved the grant agreement with CARB and also a budget amendment for the purchase of a PI-SWERL.

An initial problem was on February 28, 2018, the ICAPCD received a second quote from the Vic Etyemezian of Dust Quant, LLC where the PI-SWERL was purchased. The second quote was necessary as the first type of equipment was not available at the time of purchase. Initially a problem was encountered with the delivery of the PI-SWERL. The seller Dust –QUANT delayed the deployment of the PI-SWERL as it needed to be designed, tested, and shipped and would not be available until September 2018. Due to the deployment date, the grant agreement was extended another year.

On November 2018, the ICAPCD received the Pi-Swerl equipment and two-day training class was conducted by Formation on December 17, 2018 and December 18, 2018. In addition, a three-day training was conducted on March 26 -28, 2019 where ICAPCD staff went to various locations around the Ocotillo area and Salton Sea for soil emissivity testing and learned how to utilize the Pi-Swerl.

Despite the initial limitations, the ICAPCD had a successful training and is looking forward to continue utilizing the Pi-Swerl for additional soil emissivity testing and learning the various soil types around the Salton Sea.